


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE ECO 3552	1-2-91	<i>K. Kordik</i>
B	SEE ECO 3662	8-30-91	<i>K. Kordik</i>
C	SEE ECO 3933		

1. THIS SPEC NOT COMPLETE WITHOUT: DRAWING NO. 171838  
 NOTES, UNLESS OTHERWISE SPECIFIED:

CONTRACT NO. CAT		 <b>APPLIED MOTION PRODUCTS, INC.</b>			
APPROVALS	DATE	<b>MOTOR SPECIFICATION</b>			
DRAWN <i>R. BARRICK</i>	<i>9/11/90</i>				
CHECKED					
APPROVED <i>B. Corser</i>	<i>12/23/90</i>				
APPROVED <i>K. Kordik</i>	<i>1/2/91</i>	<b>A</b>	COMPUTER DATA BASE DRAWING	DWG NO. <b>5017-011</b>	<b>REV C</b>
			SHEET 1 OF 4		

NOTES, UNLESS OTHERWISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- 2 BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- 3 MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC FOR ONE MINUTE.
- 5 LEADS: 6, AWG 22, 7 STRAND MINIMUM. UL 3265 AND CSA APPROVED, "L" = 305mm MINIMUM.
6. INSULATION RESISTANCE: 100 MEGOHMS MINIMUM, AT 500 VDC.
- 7 AS MEASURED ACROSS ANY WINDING.
- 8 AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE (1 KHz).
- 9 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES WITH MOTOR AT REST.
- 10 SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER.
11. ROTOR: LAMINATED CONSTRUCTION.



TITLE  
MOTOR SPECIFICATION

SPEC NO. 5017-011

REV  
C

COMPUTER DATA BASE DRAWING

SHEET 2 OF 4

SPECIFICATIONS:	NOTES
STEPS PER REVOLUTION: 200	
STEP ANGLE: 1.8°	
STEP TO STEP ACCURACY: ±5%	1 2
POSITIONAL ACCURACY: ±5%	1 3
HYSTERESIS:	
WINDING RESISTANCE: 120 OHMS ±10% AT 25°C	7
WINDING INDUCTANCE: 105 mH ± 20%	8
PHASE VOLTAGE: 24 VDC	
PHASE CURRENT: 0.2 AMP (RATED)	
SHAFT RUNOUT: .013 T.I.R.	
RADIAL PLAY: 0.03 MAX WITH 2 Kg RADIAL LOAD	
END PLAY: 0.03 MAX WITH A 3 Kg AXIAL LOAD	
ROTOR INERTIA: 27 G-CM <sup>2</sup> REF	
HOLDING TORQUE; 1.6 KG-CM MIN.	1
DETENT TORQUE: 50 G-CM MIN.	
INSULATION CLASS: B	
BEARINGS: ABEC 3, DOUBLE SHIELDED	
TEMPERATURE RISE: 80°C MAX	9
OPERATING TEMPERATURE RANGE: -20 TO 50°C	
STORAGE TEMPERATURE RANGE: -40 TO 70°C	
RELATIVE HUMIDITY RANGE: 5 TO 95%	



TITLE  
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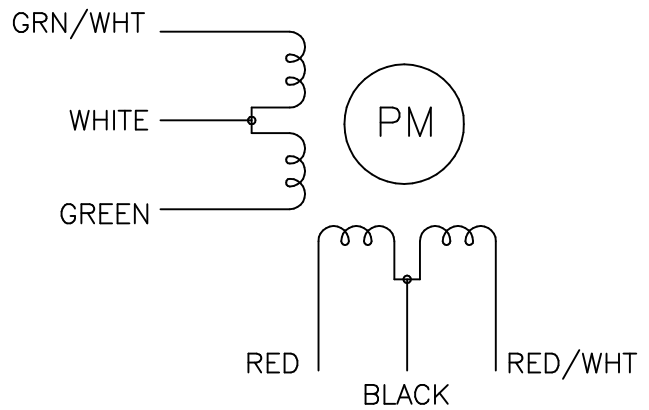
REV  
C

COMPUTER DATA BASE DRAWING

SHEET 3 OF 4

SWITCHING SEQUENCE FOR CW ROTATION  
FACING MOUNTING END

STEP	RED	RED/WHT	GREEN	GRN/WHT
0	ON	OFF	ON	OFF
1	OFF	ON	ON	OFF
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	ON
4	ON	OFF	ON	OFF



TITLE MOTOR SPECIFICATION

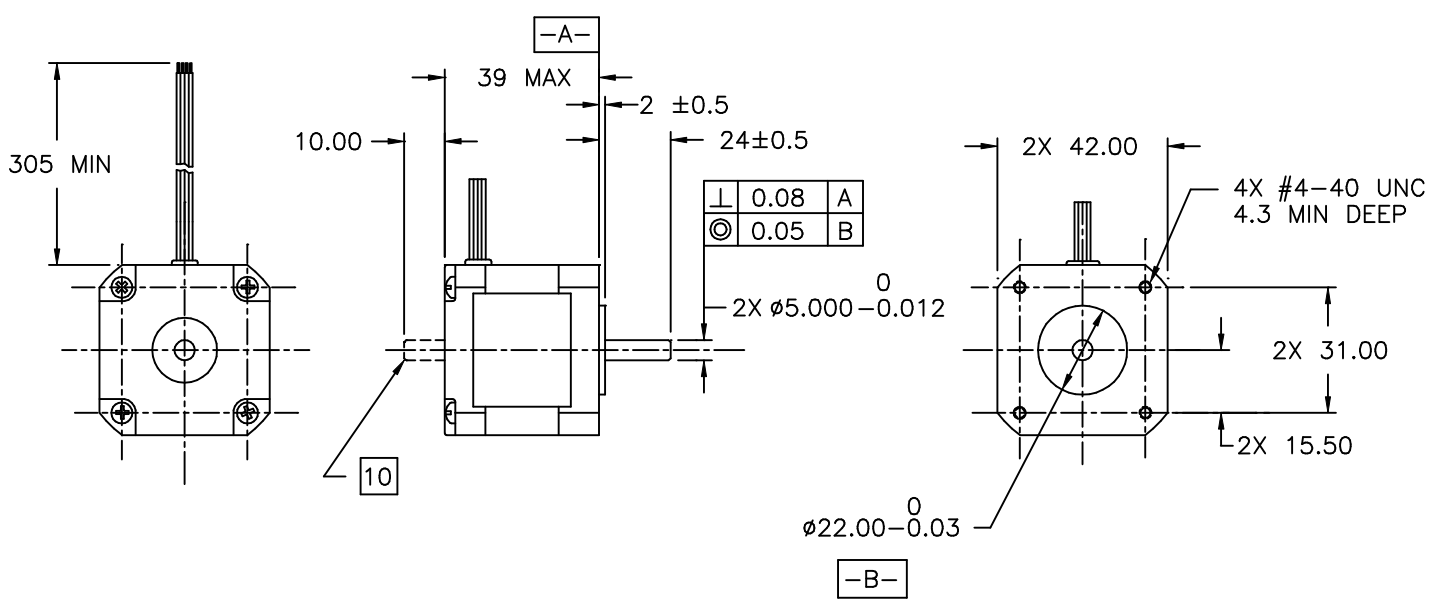
SPEC NO. 5017-011

REV C

COMPUTER DATA BASE DRAWING

SHEET 4 OF 4

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE, ECO 3561	6/9/90	B. CORSER
B	UPDATE NEW END BELLS	12/10/90	<i>K. Kardik</i>
C	ADDED NOTATION 10 3612		



THIS DWG NOT COMPLETE WITHOUT SPEC NO. 5017-

TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH)				<b>STEP MOTOR OUTLINE</b>	
X.XXX = ±0.01 (.005)					
X.XX = ±0.10 (.010)		APPROVALS	DATE	B	DWG NO. 171838
X.X = ±0.20 (.020)		DRAWN <i>R. BARRICK</i>	11/16/90		REV C
ANGLES:		CHECKED			
MACH. = ±5°		APPROVED <i>K. Kardik</i>	12/10/90	SCALE: FULL	SHEET 1
CHAM. = ±5°		COMPUTER DATA BASE DRAWING			